



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/591,683

09/05/2006

Young SEO

1-36919

1478

43935

7590

02/02/2010

FRASER CLEMENS MARTIN & MILLER LLC
28366 KENSINGTON LANE
PERRYSBURG, OH 43551

EXAMINER

SULLIVAN, DEBRA M

ART UNIT

PAPER NUMBER

3725

NOTIFICATION DATE

DELIVERY MODE

02/02/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

miller@fraser-ip.com
sloan@fraser-ip.com
clemens@fraser-ip.com

Office Action Summary	Application No. 10/591,683	Applicant(s) SEO, YOUNG	
	Examiner DEBRA M. SULLIVAN	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-8 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 5, 2010 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thoms et al (US 5,377,520) in view of Hahn et al (US 5,357,779). Thoms et al discloses a device for forming an article from a blank of sheet metal (8) comprising of a first die (7') having a cavity (2') formed therein [see FIG 5], means for producing a magnetic field (23) disposed at least adjacent the cavity (2') in the first die member (7') for selectively restraining movement of the blank of sheet metal (8) [see col. 4 lines 56-60], a second die member (3') mounted for relative reciprocal movement in respect of the first die member (7'), means for imparting relative reciprocal movement between the first die member (7') and the second die member (3') to deform the blank of sheet metal (8) within the cavity (2') of the first die member (7') [see col. 4 lines 8-14], and control means for activating and deactivating the magnetic field [it is noted that

Art Unit: 3725

it is inherent that the means for producing a magnetic field is controlled by a control means in order to activate and deactivate the magnetic field]. Thoms et al discloses the invention substantially as claimed except for wherein the control means varies the magnetic field during the deformation of the blank of sheet metal. However, Hahn et al teaches of providing a control means (1030) for varying a magnetic field (i.e. pressure) of an electromagnet (440) during the deformation of a blank of sheet metal (532) in order to selectively restrain movement of the blank during the drawing operation [see col. 14 lines 27-30, 49-52; FIGS 1 & 12]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the control means of Thoms et al to include a varying function, as taught by Hahn et al, in order to vary the restraint pressure acting on the blank of sheet metal during the drawing operation (i.e. deformation of the blank of sheet metal).

In reference to claim 2, Thoms et al further discloses the means for producing a magnetic field includes a plurality of electromagnets (23).

In reference to claim 3, Thoms et al further discloses the cavity (2') includes an open end, as seen in figure 5.

In reference to claim 6, Thoms et al further discloses the electromagnets (23) are disposed in spaced relation about the open end of the cavity (2'), as seen in figure 5.

In reference to claim 7, Hahn et al further discloses the control means includes a microprocessor for controlling the strength of the magnetic field produced by the electromagnets (440) [see col. 11 lines 28-52].

Art Unit: 3725

In reference to claim 8, Hahn et al further discloses the control means includes a source of power coupled to the electromagnets (440) through the microprocessor [see col. 11 lines 28-52].

In reference to claim 11, Thoms et al discloses a method for forming an article from a blank of sheet metal (8) including the steps of providing a first die member (7') having a cavity (2') formed therein, disposing a plurality of electromagnets (23) spaced about the cavity (2') in the first die member (7') for restraining movement of the blank of sheet metal (8) [see col. 4 lines 56-60], positioning a blank of sheet metal (8) having marginal edge portions over the cavity (2') of the first die member (7'), providing a second die member (3') mounted for relative reciprocal movement in respect of the first die member (7'), providing means for imparting relative reciprocal movement between the first die member (7') and the second die member (3') to deform the blank of sheet metal [see col. 4 lines 8-14]. Thoms et al discloses the invention substantially as claimed except for wherein the magnetic field of the electromagnets is varied to selectively restrain movement of the blank of sheet metal during the deformation of the blank of sheet metal. However, Hahn et al teaches of providing a control means (1030) for varying a magnetic field (i.e. pressure) of an electromagnet (440) during the deformation of a blank of sheet metal (532) in order to selectively restrain movement of the blank during the drawing operation [see col. 14 lines 27-30, 49-52; FIGS 1 & 12]. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the control means of Thoms et al to include a varying function, as taught by Hahn et al, in order to vary the restraint pressure acting on the blank of sheet metal during the drawing operation (i.e. deformation of the blank of sheet metal).

Response to Arguments

Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Sullivan whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 10am - 8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached at (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Debra M Sullivan/
Examiner, Art Unit 3725